

REMARKS

Claims 1-53 are pending in this application. Claims 15-43 are withdrawn in view of a restriction requirement. Applicants affirm that claims 1-14 and 44-53 are selected for prosecution on the merits.

Applicants thank the Examiner for acknowledging consideration of the references listed on the Forms PTO-1449 submitted in the Information Disclosure Statements filed on January 14, 2004 and April 13, 2004, as evidenced by the signed and initialed Forms PTO-1449.

Claim Rejections under 35 USC 103

Claims 1-6, 9-14, 44-53 are rejected under 35 U.S.C. §103(a) as being obvious over Nishi (US 2002/0036762). Applicants respectfully traverse this rejection.

Independent claims 1, 44, 48 and 53 recite, among other things, a first reflector having at least two layers and a second reflector having at least two layers. According to one embodiment of the invention, metallic mirrors may be provided with a coating of aluminum oxide (see the specification at page 18, paragraph 00073). Alternatively, the metallic mirrors may include an aluminum coating that is covered with a native oxide (see the specification at page 19, paragraph 00074).

While Nishi appears to disclose an autofocus/autoleveling system having a mirror 158 and a rotary directional vibrating plate 164 (see Nishi, page 10, paragraph 0132 and Fig. 5), Nishi is deficient because it fails to teach or suggest a first reflector having at least two layers and a second reflector having at least two layers.

Regarding independent claims 44 and 53, these claims further recite, among other things, selecting the first and second reflectors to obtain a minimum total effective translation of the beam *at the surface* of the first and second reflectors. According to one embodiment of the invention, the thickness of the coating of the mirrors is controlled to provide a minimized Goos-Haenchen shift (see the specification at pages 18-19, paragraph 00073).

As discussed above, Nishi fails to teach or suggest a first reflector having at least two layers and a second reflector having at least two layers. Thus, the mirrors of the autofocus/autoleveling system of Nishi suffer from the problems discussed at page 16, paragraphs 00063-00064 of the specification. In particular, mirror 158 and rotary directional vibrating plate 164 are a primary source of process dependency. Mirror 158 and rotary directional vibrating plate 164 give rise to apparent surface depression which is wavelength and polarization dependent. Mirror 158 and rotary directional vibrating plate 164 have

polarization dependent Goos-Haenchen shift which causes p-polarized light to be translated, thereby producing a separated beam.

In view of the foregoing differences between independent claims 1, 44, 48, 53 and the cited art, Applicants respectfully submit that the Examiner has failed to establish a prima facie case of obviousness based on Nishi. Thus, claims 1, 44, 48 and 53 are allowable. Additionally, claims 2-6, 9-14, 45-47, and 49-52 are allowable at least by virtue of their dependency.

Claims 7 and 8 are rejected under 35 U.S.C. §103(a) as being obvious over Nishi in view of Kawaguchi (US 2002/0000520). Applicants respectfully traverse this rejection.

Claims 7 and 8 dependent from independent claim 1 and therefore include the features of claim 1 recited above. Additionally, claims 7 and 8 recite, among other things, a second surface that is oriented in a same direction as the first surface, the second surface being configured to direct the beam toward the first surface. For example, metallic mirrors have an aluminum coating that is covered with a native oxide that grows naturally after deposition of the aluminum coating (see the specification at pages 19, paragraph 00074).

Kawaguchi is directed to a surface position detection device that detects the surface position of a detection target surface provided with a projection system. The Examiner relies on surfaces 6b and 6c of the pentaprism (see Fig. 6) to teach the features of the first surface and the second surface of dependent claims 7 and 8. Kawaguchi is deficient at least because it fails to teach or suggest a second surface that is oriented in a same direction as the first surface. Rather, surfaces 6b and 6c are oriented in different directions that form an angle ϕ (see Fig. 6). Additionally, Nishi and Kawaguchi, both alone and in combination, fail to teach or suggest a first reflector having at least two layers and a second reflector having at least two layers.

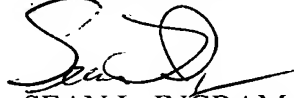
In view of the foregoing differences between claim 1, 7, 8 and the cited art, Applicants respectfully submit that the Examiner has failed to establish a prima facie case of obviousness based on Nishi in view of Kawaguchi. Thus, claims 1, 7 and 8 are allowable over these references.

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Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'Sean L. Ingram', with a stylized flourish at the end.

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